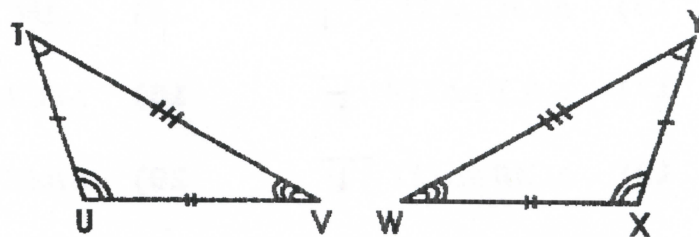


For #1 – 3, use the picture at the right.



1) Name the angles that are congruent:

$\angle U \cong \angle X$ $\angle T \cong \angle Y$ $\angle V \cong \angle W$

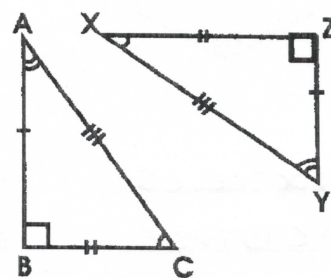
2) Name the sides that are congruent:

$\overline{TU} \cong \overline{YX}$ $\overline{TV} \cong \overline{YW}$ $\overline{UV} \cong \overline{XW}$

3) Complete the following congruence statement:

$\triangle TUV \cong \triangle YXW$

For #4 – 6, use the picture at the right.



4) Name the angles that are congruent:

$\angle A \cong \angle X$ $\angle B \cong \angle Z$ $\angle C \cong \angle Y$

5) Name the sides that are congruent:

$\overline{AB} \cong \overline{XZ}$ $\overline{BC} \cong \overline{YZ}$ $\overline{CA} \cong \overline{XY}$

6) Complete the following congruence statement:

$\triangle CBA \cong \triangle XYZ$

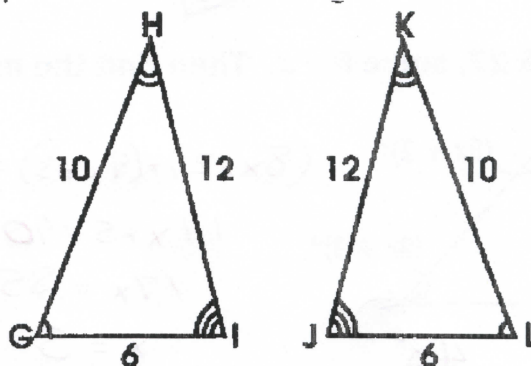
For #7 – 14, complete each congruence statement using the pictures at the right.

7) $\triangle HGI \cong \triangle KLI$

8) $\triangle JKL \cong \triangle IHG$

9) $\triangle IGH \cong \triangle JLK$

10) $\triangle LJK \cong \triangle GIH$

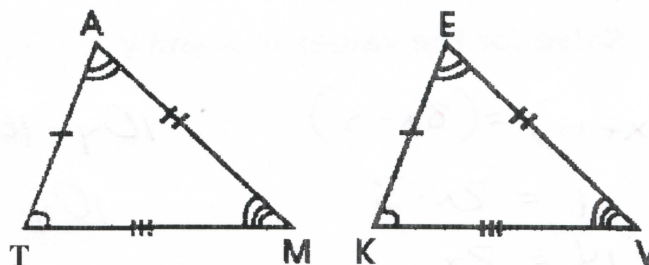


11) $\triangle ATM \cong \triangle KEV$

12) $\triangle TMA \cong \triangle KVE$

13) $\triangle MAT \cong \triangle VEK$

14) $\triangle TAM \cong \triangle KEV$



For #15-20, use the picture at the right to determine if the congruency statement is TRUE or FALSE.

15) $\triangle ABC \cong \triangle XYZ$ **T**

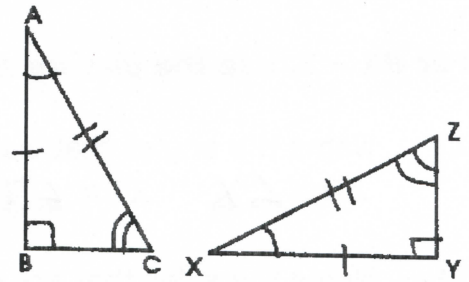
16) $\triangle ABC \cong \triangle ZYX$ **F**

17) $\triangle ACB \cong \triangle YXZ$ **F**

18) $\triangle BCA \cong \triangle YXZ$ **F**

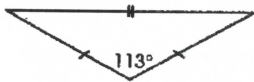
19) $\triangle CAB \cong \triangle ZXY$ **T**

20) $\triangle BAC \cong \triangle YXZ$ **T**



For #21-24, classify the triangles by their sides and angles.

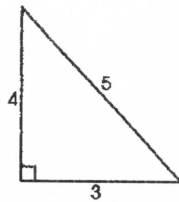
21)



side ISOSCELES

angle OBTUSE

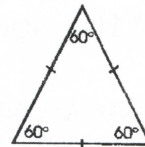
22)



side SCALENE

angle RIGHT

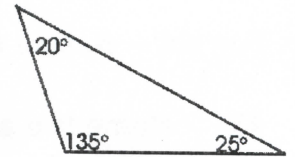
23)



side EQUILATERAL

angle ACUTE
EQUIANGULAR

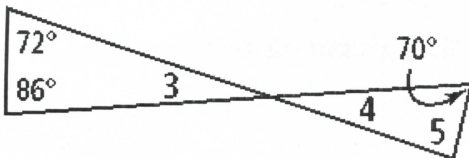
24)



side SCALENE

angle OBTUSE

25) Find the measure of the missing angles

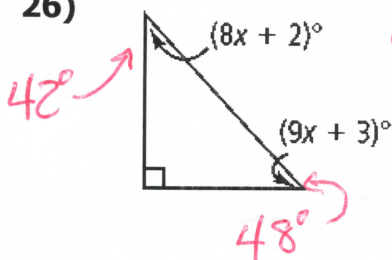


$m\angle 3 = \underline{22^\circ}$ $m\angle 4 = \underline{22^\circ}$

$m\angle 5 = \underline{88^\circ}$

For #26 & 27, solve for x . Then find the measures of the missing angles.

26)



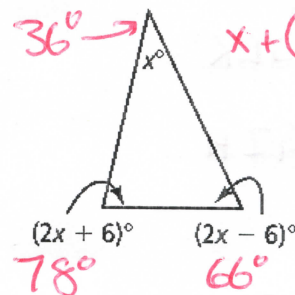
$(8x + 2) + (9x + 3) = 90$

$17x + 5 = 90$

$17x = 85$

$x = 5$

27)



$x + (2x + 6) + (2x - 6) = 180$

$5x = 180$

$x = 36$

28) Solve for the values of x and y

$(6x + 11) = (8x - 3)$

$11 = 2x - 3$

$14 = 2x$

$7 = x$

$10y - 16 = 74$

$10y = 90$

$y = 9$

